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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,324	12/08/2003	Valeria Griep Erdos	PG6044P0561US	2438

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EXAMINER	
WARD, JESSICA LEE	
ART UNIT	**PAPER NUMBER**
1733	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/12/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/730,324	ERDOS ET AL.	
	Examiner	Art Unit	
	Jessica L. Ward	1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 January 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 3-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 3-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

FINAL ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 1, it is unclear how the polymeric film composition of step (b) can have a thickness before it is extruded in step (c). Applicant is asked to clarify. It is suggested to remove the thickness limitation from step (b) and incorporate it into step (c).

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1, 3-4 and 6-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Srinivasan et al. (US 5567501, previously cited) in view of Quantrille et al. (US 5804286, previously cited), further in view of Karami et al. (US 4726976, previously cited), and further in view of Wu (US 5422172).

With respect to claim 1, Srinivasan teaches a method of making a laminate elastic fabric, that can be used as a component in diapers and personal hygiene products, by providing first and second nonwoven fabric webs (10a, 10b) comprised of thermoplastic polymers (column 2, lines 66-67; column 3, lines 6-7), providing an elastic polymeric film composition (12) having a thickness within the claimed range (column 2, line 67; column 3, lines 11-13; column 4, lines 3-

5; column 4, line 31; column 5, lines 4-6), positioning the elastic film onto the first nonwoven web, with the first nonwoven web in a substantially relaxed and untensioned state (Figure 2; column 2, line 66 – column 3, line 1), depositing the second nonwoven web onto the elastic film, with the second nonwoven web in a substantially relaxed and untensioned state (column 2, line 66 – column 3, line 1), and applying elevated temperature to affix the second nonwoven web to the film, with the elevated temperature provided by contact with an engraved calendar roll (20a, 20b) (column 2, lines 52-53; column 3, lines 1-3; column 3, lines 22-24; column 3, lines 39-43; column 4, lines 34-40) having a discontinuous bond pattern that falls within Applicant's claimed range (column 3, lines 49-50; column 5, lines 35).

Srinivasan teaches that the laminate can be stretched as it exits the calendar rolls (column 3, lines 55-58) thereby implying that the nonwoven webs can be elongated; however, it is unclear as to what percent the elongation is.

It is known in the art of making laminate elastic fabrics, that can be used as a component in diapers and personal hygiene products, to laminate a relaxed/untensioned nonwoven fabric web comprised of thermoplastic polymers having a CD elongation of at least 120% to each surface of an elastic film and then stretch the bonded laminate in the MD and/or CD, as taught by Quantrille (column 1, line 64 – column 2, line 10; column 8, lines 20-27; column 9, lines 4-10 and 30-45 and 59-63; column 10, lines 1-4).

Selection of a CD elongation for the nonwovens of Srinivasan would have been within purview of one having ordinary skill in the art depending on the desired degree of elongation and hence the final properties of the bonded laminate; however, it would have been obvious to use nonwovens having a CD elongation of at least 120% for those of Srinivasan because such is

known in the art when bonding relaxed/untensioned nonwovens to a film and then stretching the bonded laminate, as taught by Quantrille.

Srinivasan also teaches that a variety of elastic polymeric film compositions can be used as alternatives to a polyolefin elastic film composition, such as elastomeric styrene block copolymer film composition (column 4, lines 9-11; column 6, lines 62-64); however, it is unclear as to whether the reference teaches the film composition being a vinylidene isoprene polymer. Quantrille teaches that a variety of elastic film compositions, such as a vinylidene isoprene elastic film composition (i.e. SIS polymer film), can be used as an alternative to polyolefin elastic films to form the laminate (column 8, lines 40-67). Selection of a particular elastic film composition for that of Srinivasan would have been within purview of one having ordinary skill in the art; however, it would have been obvious to use a vinylidene isoprene polymer for the elastic film composition of Srinivasan because such is known in the art as an alternative to a polyolefin elastic film composition, as taught by Quantrille.

It is unclear as to whether Srinivasan teaches extruding the elastic film onto the first nonwoven. It is known in the art to extrude a thermoplastic film onto a first relaxed/untensioned nonwoven web, as an alternative to using a pre-formed film, deposit a second relaxed/untensioned nonwoven web onto the extruded film, and then affix the nonwovens and film to each other using a heated calendar roll having a discontinuous bond pattern that falls within Applicant's claimed range, where extruding the film onto the nonwoven improves the securing of the film to the nonwoven, as taught by Karami (Figure 4; column 1, lines 6-8; column 3, lines 50-60; column 4, lines 7-30; column 4, lines 48-55; **column 4, line 68 – column 5, line 4**).

Therefore, it would have been obvious to one having ordinary skill in the art to extrude the film of Srinivasan onto the first nonwoven and deposit the second nonwoven of Srinivasan onto the extruded film because such is known in the art as an alternative to using a pre-formed film, as taught by Karami, where this improves the securing of the film to the nonwoven.

It is unclear as to whether Srinivasan teaches unwinding the second nonwoven web. It is known in the art to extrusion laminate an elastic thermoplastic film to relaxed/untensioned nonwoven webs (i.e. carded, spunbonded, melt blown, etc.) that are unwound from supply rolls because the nonwovens can be produced off-site and then easily incorporated into a continuous lamination process, as taught by Wu (Figure 1; column 1, lines 10-15; column 3, lines 65-68). One reading Srinivisan as a whole would have readily appreciated that the reference places no criticality on whether the carded nonwoven webs are formed in-line or stored on rolls that are incorporated into the lamination process. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to unwind the first and second nonwoven webs of Srinivasan because the webs can be produced off-site and then easily incorporated into a continuous lamination process, as taught by Wu.

Regarding claim 3, Srinivasan in view of Quantrille teaches such (Quantrille at column 8, lines 20-25).

Regarding claim 4, Srinivasan teaches such (Figure 2) and/or Srinivasan in view of Quantrille teaches such (Quantrille at column 3, line 60 – column 4, line 30).

Regarding claim 6, selection of a thickness for the film would have been within purview of one having ordinary skill in the art; however, it would have been obvious to use a film having

a thickness that falls within Applicant's claimed range because such is known in the art, as taught by Karami (column 4, lines 64-68).

Regarding claim 7, Srinivasan teaches such.

Regarding claim 8, Srinivasan teaches such (column 4, lines 35-40).

Regarding claims 9-10, selection of a basis weight for the nonwovens would have been within purview of one having ordinary skill in the art; however, it would have been obvious to use nonwovens having a basis weight that falls within the claimed range because such is known in the art, as taught by Quantrille (column 10, lines 50-55).

Regarding claim 11, Srinivasan teaches stretching the laminated fabric after attaching the nonwovens to the elastic film (column 3, lines 55-58) but it is unclear as to the direction of stretching. It would have been obvious to one having ordinary skill in the art to stretch the laminated fabric in the MD because it known in the art to stretch a laminated fabric in the MD and/or CD after attaching nonwovens to an elastic film while the nonwovens and elastic film are in a relaxed, untensioned state, as taught by Quantrille (column 10, lines 1-5).

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Srinivasan et al., Quantrille et al., Karami et al. and Wu as applied to claim 1 above, and further in view of Esneault et al. (WO 96/16122, previously cited).

Regarding claim 5, it would have been obvious to one having ordinary skill in the art at the time of the invention to use the particular claimed elastic material because Esneault teaches that such material is an improvement over other elastic film materials in that it has improved extrusion processing properties, improved stress relaxation properties, improved creep

performance, and improved stability during processing, and one of ordinary skill in the art would have been motivated to obtain these advantages (pages 1-4 and 11-14).

6. Claims 1, 3-4 and 6-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karami et al. in view of Srinivasan et al., further in view of Quantrille et al., and further in view of Wu.

With respect to claim 1, and as mentioned above, Karami teaches a method of making a laminate fabric, that can be used as a component in diapers and personal hygiene products (column 1, lines 6-8), by providing first and second nonwoven fabric webs (14, 16) comprised of thermoplastic polymers (column 3, lines 58-64), providing a thermoplastic film composition (12) having a thickness within the claimed range (column 3, lines 53-57; column 4, lines 64-68), extruding the film composition onto the first nonwoven web (column 4, line 68 – column 5, line 4), with the first nonwoven web in a substantially relaxed and untensioned state (Figure 4; column 4, lines 7-9), depositing the second nonwoven web onto the film, with the second nonwoven web in a substantially relaxed and untensioned state (Figure 4; column 4, lines 7-9; column 4, line 68 – column 5, line 4), and applying elevated temperature to affix the second nonwoven web to the film, with the elevated temperature provided by contact with an engraved calendar roll (18) (Figure 4; column 4, lines 7-30) having a discontinuous bond pattern that falls within Applicant's claimed range (column 4, lines 48-49 and 52-55).

It is unclear as to whether the reference teaches the nonwovens having a CD elongation of at least 120%, the film being elastic, the elastic film being comprised of a vinylidene isoprene polymer, and unwinding the second nonwoven web.

It would have been obvious to one having ordinary skill in the art to use an elastic film composition in the laminate of Karami because it is known in the art to make laminate fabrics, that can be used as a component in diapers and personal hygiene products, using an elastic film composition as an alternative to a non-elastic film composition, for the benefit of imparting elastic properties to the laminate, and affixing a nonwoven web to each side of the film, with the nonwovens and film being in a relaxed and untensioned state, using a heated calendar roll having a discontinuous bond pattern, as taught by Srinivasan (column 5, lines 4-6).

Srinivasan also teaches that the laminate can be stretched as it exits the calendar rolls to enhance clarity and size of the apertures that are formed during the calendar bonding process (column 2, lines 52-53; column 3, lines 22-24 and 55-58). Like Srinivasan, Karami also teaches apertures being formed during the calendar bonding process (end of abstract; column 4, lines 20-32); therefore, it would have been obvious to one having ordinary skill in the art to stretch the laminate of Karami as it exits the calendar rolls because such it known in the art, as taught by Srinivasan, where this enhances the clarity and size of the apertures. Therefore, since Karami in view of Srinivasan teach stretching the laminate, one would appreciate that the nonwovens of Karami can be elongated; however it is unclear as to what percent the elongation is.

It is known in the art of making laminate elastic fabrics, that can be used as a component in diapers and personal hygiene products, to laminate a relaxed/untensioned nonwoven fabric web comprised of thermoplastic polymers having a CD elongation of at least 120% to each surface of an elastic film and then stretch the bonded laminate in the MD and/or CD, as taught by Quantrille (column 1, line 64 – column 2, line 10; column 8, lines 20-27; column 9, lines 4-10 and 30-45 and 59-63; column 10, lines 1-4).

Selection of a CD elongation for the nonwovens of Karami would have been within purview of one having ordinary skill in the art depending on the desired degree of elongation and hence the final properties of the bonded laminate; however, it would have been obvious to use nonwovens having a CD elongation of at least 120% for those of Karami because such is known in the art when bonding relaxed/untensioned nonwovens to a film and then stretching the bonded laminate, as taught by Quantrille.

Karami in view of Srinivasan also teach that a variety of elastic films can be used as alternatives to a polyolefin elastic film, such as elastomeric styrene block copolymer film (Karami at column 3, lines 55-56 and Srinivasan at column 4, lines 9-11; column 6, lines 62-64); however, it is unclear as to whether they teach the film being a vinylidene isoprene polymer. Quantrille teaches that a variety of elastic films, such as a vinylidene isoprene elastic film (i.e. SIS polymer film), can be used as an alternative to polyolefin elastic films to form the laminate (column 8, lines 40-67). Selection of a particular elastic film for that of Karami would have been within purview of one having ordinary skill in the art; however, it would have been obvious to use a vinylidene isoprene polymer for the elastic film of Karami because such is known in the art as an alternative to a polyolefin elastic film, as taught by Quantrille.

It is unclear as to whether Karami teaches unwinding the second nonwoven web. It is known in the art to extrusion laminate an elastic thermoplastic film to relaxed/untensioned nonwoven webs (i.e. carded, spunbonded, melt blown, etc.) that are unwound from supply rolls because the nonwovens can be produced off-site and then easily incorporated into a continuous lamination process, as taught by Wu (Figure 1; column 1, lines 10-15; column 3, lines 65-68). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the

invention to unwind the first and second nonwoven webs of Karami because the webs can be produced off-site and then easily incorporated into a continuous lamination process, as taught by Wu.

Regarding claim 3, Karami in view of Quantrille teaches such (Quantrille at column 8, lines 20-25).

Regarding claim 4, Karami teaches such (column 3, lines 58-64).

Regarding claim 6, Karami teaches such (column 4, lines 64-68).

Regarding claim 7, Karami teaches such (Figure 4).

Regarding claim 8, Karami teaches such (column 4, lines 20-31).

Regarding claims 9-10, Karami teaches such (column 5, lines 9-11).

Regarding claim 11, and as discussed above, Karami in view of Srinivasan teach stretching the laminated fabric after attaching the nonwovens to the elastic film (Srinivasan at column 3, lines 55-58) but it is unclear as to the direction of stretching. It would have been obvious to one having ordinary skill in the art to stretch the laminated fabric in the MD because it known in the art to stretch a laminated fabric in the MD and/or CD after attaching nonwovens to an elastic film while the nonwovens and elastic film are in a relaxed and untensioned state, as taught by Quantrille (column 10, lines 1-5).

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Karami et al., Srinivasan et al., Quantrille et al. and Wu as applied to claim 1 above, and further in view of Esneault.

Regarding claim 5, it would have been obvious to one having ordinary skill in the art at the time of the invention to use the particular claimed elastic material because Esneault teaches

that such material is an improvement over other elastic film materials in that it has improved extrusion processing properties, improved stress relaxation properties, improved creep performance, and improved stability during processing, and one of ordinary skill in the art would have been motivated to obtain these advantages (pages 1-4 and 11-14).

Response to Arguments

8. Applicant's arguments filed 1/25/07 have been fully considered but they are not persuasive.

9. On p. 5 of the remarks, Applicant argues that Srinivasan is understood to teach away from the present invention since all three layers are unwound from unwind stations to assemble the laminate.

Although Applicant has failed to clearly set forth his argument, the Examiner believes Applicant's position is that Srinivasan teaches a pre-formed film that is unwound and therefore the reference is understood to teach away from the present invention, which extrudes the film onto the nonwoven web. The Examiner readily acknowledges that Srinivasan does not expressly teach that the film can be extruded onto the first nonwoven. But, neither does it teach or suggest anything that would allow one having ordinary skill in the art to conclude that extrusion onto the nonwoven is undesirable. Therefore, in light of the teaching of Karami, one having ordinary skill in the art would have been motivated to extrude the film of Srinivasan onto the first nonwoven, as an alternative to using a pre-formed film, because this improves securing of the film to the nonwoven. Applicant is invited to carefully reread the rejection set forth in paragraph 4 above.

As for Srinivasan unwinding the nonwoven webs, the Examiner reminds Applicant that his own invention does the same thing and even claims unwinding the second nonwoven in step (d).

10. On p. 5-6 of the remarks, Applicant argues that Quantrille is also understood to teach away from the present invention because the reference appears to teach assembling pre-formed layers and not extrusion of the film onto the nonwoven.

The Examiner respectfully points out that Quantrille was ONLY used for its more general teaching of making laminate elastic fabrics, that can be used as a component in diapers and personal hygiene products, by laminating a relaxed/untensioned nowoven fabric web comprised of thermoplastic polymers having a CD elongation of at least 120% to each surface of an elastic film and then stretching the bonded laminate in the MD and/or CD. The Examiner reminds Applicant that references cannot be argued in a vacuum.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jessica L. Ward whose telephone number is 571-272-1223. The examiner can normally be reached on Mon-Fri between 9AM and 6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard D. Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jessica L. Ward
Primary Examiner
Art Unit 1733